SPRING ANNOTATION BASED CONFIGURATION

Starting from Spring 2.5 it became possible to configure the dependency injection using **annotations**. So instead of using XML to describe a bean wiring, you can move the bean configuration into the component class itself by using annotations on the relevant class, method, or field declaration.

Annotation injection is performed before XML injection, thus the latter configuration will override the former for properties wired through both approaches.

Annotation wiring is not turned on in the Spring container by default. So, before we can use annotation-based wiring, we will need to enable it in our Spring configuration file. So consider to have following configuration file in case you want to use any annotation in your Spring application.

```xml
<?xml version="1.0" encoding="UTF-8"?>

<beans xmlns="http://www.springframework.org/schema/beans"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:context="http://www.springframework.org/schema/context"
    xsi:schemaLocation="http://www.springframework.org/schema/beans
    http://www.springframework.org/schema/beans/spring-beans-3.0.xsd
    http://www.springframework.org/schema/context
    http://www.springframework.org/schema/context/spring-context-3.0.xsd">

    <context:annotation-config/>
    <!-- bean definitions go here -->

</beans>
```

Once <context:annotation-config/> is configured, you can start annotating your code to indicate that Spring should automatically wire values into properties, methods, and constructors. Let us see few important annotations to understand how they work:

S.N.	Annotation & Description
1	@Required The @Required annotation applies to bean property setter methods.
2	@Autowired The @Autowired annotation can apply to bean property setter methods, non-setter methods, constructor and properties.
3	@Qualifier The @Qualifier annotation along with @Autowired can be used to remove the confusion by specifiying which exact bean will be wired.
4	JSR-250 Annotations Spring supports JSR-250 based annotations which include @Resource, @PostConstruct and @PreDestroy annotations.